density of 0.85-0.91 g/cm^3, that is so-called ultra or very low-density polyethylene (ULDPE or VLDPE), made by medium or low pressure processes.

The fundamental differences between the HPLD used in the present invention and the prior art ULDPE is readily apparent from the following references:

Jitsuyo Practical Plastic Dictionary, 1993, at page 3, Table 1-1 and FIG. 1-1,

Latest Laminate Processing Handbook, 1989, page 284-285, Table 1, FIG 1.

The above-references are attached to this paper, and will additionally be filed in an IDS.

Specifically, the density of low-density polyethylene (LDPE) attained by high pressure processing (1,000 kg/cm^2 or higher) is generally 0.910 to 0.940 g/cm^3, with some variation. The production of LDPE having a density lower than 0.910 g/cm^3 can be realized only by adopting methods and conditions which are impractical. As a result, a person having ordinary skill in the art would assume that LDPE having a density of 0.85-0.91 g/cm^3 (such as disclosed in Ueda '354) can only be obtained by medium or low pressure processes and not high pressure processes.

In this connection, Ueda '354 discusses at column 19, lines 9-17 that the polymerization temperature is usually in the range

of -50 - +100°C, and the polymerization pressure is in the range of from atmospheric pressure to 100 kg/cm^2. These polymerization conditions are applicable to low and medium pressure processes, and not the high pressure processes which produce the HPLD used in the present invention. Indeed, all the examples set forth in Ueda '354 are carried out under conditions for low or medium pressure processes. Accordingly, Ueda '354 neither teaches nor suggests the LDPE can be obtained by high pressure processing. Further, the LDPE (HPLD) obtainable by high pressure processes have a large number of long chain branches, and has excellent modability, thereby obtaining an improved product. In contrast, LDPE having a density of 0.85-0.91 g/cm^3 obtained by the medium or low pressure process, as in Ueda '354, will have a relatively small number of long chain branches. As a result, the product produced according to Ueda '354 will have poor moldability.

As described at page 20, lines 20-25 of the specification, when the composition of the present invention is laminated onto a surface of crystalline polypropylene film, the laminate exhibits excellent moldability without suffering from surging or neck-in enlargement, even if the laminating speed is increased. This surprising unexpected result is clear by comparing examples 1 and 2 with comparative example 1 in the specification. Specifically, when HPLD (component B) is used in combination with the random

copolymer (A) in the laminating composition, the values of neck-in are both 50μm in examples 1 and 2. In contrast, when HPLD is not used, their neck-in values can be as large as 150μm as is shown in comparative example 1. Thus, a marked improvement of neck-in in the laminate molding can be achieved by the addition of HPLD to component A.

Additionally, the propylene polymer composition according to Ueda '354 is obtained by synthesizing the constituent components in a catalyst system at medium or low pressure. See claims of Ueda '354. The transition metal compound used in the catalyst system of Ueda '354 is specific to medium or low pressure polymerizations. Therefore, it is not practical that only an ethylene-based polymer as one component in the composition is produced by a high pressure process.

As has been shown above, the HPLD of the invention and the LDPE of Ueda '354 are clearly distinguished from each other by arising from fundamentally different technologies, even though the density ranges may overlap. The resulting compositions are clearly different from each other in their structure and in their effectiveness when used in a laminate. Therefore, even if ULDPE is used together with a propylene/1-butene random copolymer for laminating, excellent moldability without suffering from neck-in enlargement would not be attained. Additionally, the utilization

of ULDPE in Ueda '354 is drawn to a fundamentally different object, which is the obtaining of impact strength. See Ueda '354 at column 1, lines 53-54.

Accordingly, the composition of the present invention and that set forth in Ueda '354 are fundamentally different from each other in their object, constitution and effectiveness.

Conclusion

The present application is a divisional of parent application Serial No. 09/056,090, filed April 7, 1998, which is filed to pursue subject matter not covered or specifically claimed in the allowed claims of the parent application.

Favorable action and early allowance of the claims are respectfully requested.

If the Examiner has any questions concerning this application, he is requested to contact Robert E. Goozner, Ph.D. Reg. No. 42,593, at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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